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IN REPLY REFER TO

AGAM-P (M) (26 Oct 67) FOR OT RD-670277

2 November 1967

SUBJECT: Operational Report - Lessons Learned, Headquarters,
 222d Aviation Battalion

TO: SEE DISTRIBUTION

1. Subject report is forwarded for review and evaluation by USACDC in accordance with paragraph 6f, AR 1-19 and by USCONARC in accordance with paragraph 6c and d, AR 1-19. Evaluations and corrective actions should be reported to ACSFOR OT within 90 days of receipt of covering letter.

2. Information contained in this report is provided to insure appropriate benefits in the future from Lessons Learned during current operations, and may be adapted for use in developing training material.

BY ORDER OF THE SECRETARY OF THE ARMY:

Kenneth G. Wickham

KENNETH G. WICKHAM
 Major General, USA
 The Adjutant General

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 as

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OPERATIONAL REPORT LESSONS LEARNED



QUARTER ENDING

30 APRIL 1967

222D AVIATION BATTALION

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**FOR OT RD File
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GROUP 4

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DEPARTMENT OF THE ARMY
HEADQUARTERS, 222D AVIATION BATTALION
APO 96291

AVGC-I

14 May 1967

SUBJECT: Operational Report-Lessons Learned (RCS-CSFOR 67)

SECTION I

SIGNIFICANT EVENTS

A. Command.

1. (U) Lieutenant Colonel Thomas E. Thompson continues in command of this battalion.
2. (U) Major John R. Moran Jr, assumed command of the 147th Assault Support Helicopter Company on 1 Feb 67 vice Major Jack L. Keaton.
3. (C) The organization structure of the 222d Aviation Battalion during this reporting period was as follows (all units located at Vung Tau).
 - a. Headquarters and Headquarters Company
 - (1) 85th Medical Detachment
 - b. 54th Utility Airplane Company (U1A)
 - (1) 255th Transportation Detachment
 - c. 73rd Surveillance Airplane Company (OV-1)
 - d. 147th Assault Support Helicopter Company (CH-47)
 - (1) 171st Transportation Detachment
 - (2) 772d Medical Detachment

B. Personnel Morale and Discipline.

1. (U) There were no significant incidents of personnel turbulence during the reporting period. A considerable number of excess personnel remain assigned to the battalion as a result of the inactivation of the three assigned CV-2 companies on 1 January 1967. The majority of these personnel have undergone MOS reclassification and are nearing the completion of an extensive on-the-job training program.
2. (U) No applications for warrant officer flight training or OCS were submitted. Two enlisted men applied for direct appointments to USAR warrant officer. One warrant officer applied for a direct USAR commission.

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SUBJECT: Operational Report-Lessons Learned (RCS-CSFOR)

3. (U) Recommendations for awards submitted during the quarter - 202. Awards received during the quarter - 119. Approximately one-half of the awards received were Basic Air Medals and Oak Leaf Clusters to the Air Medal.

4. (U) The number of personnel voluntarily extending their normal tour by six months remains high. For this reporting period 87 personnel were voluntarily extended.

C. Intelligence and Counterintelligence.

1. (U) There were no significant events in this area. The battalion S-2 section continues to publish a weekly summary of intelligence information gathered from INTSUM'S received and attendance at weekly USARV G-2 briefing.

D. Plans, Operations and Training.

1. (C) Plans for local security were revised to conform to new plans published by the 53d General Support Group and Vung Tau Sub Area Command. The battalion was levied for 24 guards to augment the airfield defense security platoon.

2. (U) During this quarter, the battalion provided Army Aviation support on each of the eighty-nine days, committing an average of 21 aircraft per day. Missions conducted included troop transport, artillery airmobile transport, aerial resupply, medical evacuation, radio relay and visual, photographic, and electronic aerial reconnaissance. Statistics generated while accomplishing these missions are listed in Inclosure 1.

3. (U) Major operations supported by this battalion during this quarter were Junction City, Portsea, Market Time and Leeton.

4. (C) During Operation Junction City, Phase I, this battalion acted as control headquarters for a provisional CH-47 (Chinook) battalion which pooled all CH-47 assets (four companies) under one headquarters. The after action report for this operation is found at Inclosure 2.

5. (U) Training in mandatory subjects has continued on a regularly scheduled basis. Aviator training has been primarily directed toward in-country orientation, transition training in the U1A and maintenance of instrument proficiency. Classes have been conducted to train non instrument rated aviators in instrument procedures and an instrument flight training program has been integrated into normal missions. With the wet monsoons beginning, instrument proficiency becomes increasingly important.

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SUBJECT: Operational Report-Lessons Learned (RCS-CSFOR 67)

6. (U) The battalion has been receiving quotas for USAF Jungle Survival School at Clark AFB, Philippines. Emphasis has been placed on training the OV-1 pilots and the unit Escape and Evasion Officers. The battalion received and filled 15 quotas during this period.

E. Logistics.

1. (U) The battalion self-help construction program has been completed. All troops are now housed in hutment type dwellings.

2. (U) Two newly constructed maintenance hangers were accepted by the battalion this quarter. They furnish maintenance facilities for the 54th Utility Airplane Company (U14), the 147th Assault Support Helicopter Company (CH-47) and the 171st Transportation Detachment (CH-47).

3. (U) A cyclic maintenance program was initiated for all 1962 model CH-47's with subsequent turn-in and shipment to ARADMAC, Corpus Christi, Texas. Five 1962 model CH-47's were turned in during April and the remaining two will be turned in early in May. Two replacement 1966 model CH-47's were received in April and 5 additional aircraft are to be issued early in May.

F. Information.

1. (U) During this quarter and, coincidentally, within two days of one another, the 54th Utility Airplane Company and the 147th Assault Support Helicopter Company each transported their 100,000th passenger. These accomplishments occurred on the 19th and 21st of April, respectively.

G. Signal.

1. (U) There were no significant events in this area.

H. Surgeon.

1. (U) The battalion surgeon continues active in Aviation Safety and Aeromedical Education and Training, as well as participating regularly in MEDCAP activities.

I. Other. None

(3)

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AVGC-I

SUBJECT: Operational Report-Lessons Learned (RCS-CSFOR 67)

SECTION II, PART I

LESSONS LEARNED

A. PERSONNEL.

1. (U) ITEM. Excessive number of recurring reports.

DISCUSSION. There are eight monthly reports, one weekly report and one daily report required from the Personnel Section on a recurring basis. Each report requires considerable research, preparation and detailed record keeping. The man hours expended in the preparation of these reports places a serious burden on the overall operations of the Personnel Section.

OBSERVATIONS. The list of recurring reports should be reviewed and consolidated whenever possible. Some reports that could be consolidated are: Personnel Information Roster, Senior Grade Personnel Information Roster, and Non-receipt of Assignment Instructions consolidated into Personnel Information Roster; Enlisted Personnel Requisition and MOS Inventory consolidated into MOS Inventory; and Monthly Report of MPC Transactions combined into a modified International Balance of Payments Report. Another example of eliminating a duplication of reports would be to have the officer strength report rendered telephonically to USARV daily, relayed through the 12th Combat Aviation Group, thereby eliminating a written weekly officer strength report rendered to the 12th Combat Aviation Group.

B. OPERATIONS.

1. (U) ITEM. Provisional CH-47 (Chinook) Battalion.

DISCUSSION. The 222d Aviation Battalion was the operating headquarters for all CH-47 operations in II FF V during Phase I of Operation Junction City. This was done to test the concept of a provisional CH-47 battalion in support of large tactical operations.

OBSERVATIONS. The results obtained in this test were excellent. This organization is well suited to control large scale employment of CH-47 helicopters in tactical operations that are conducted in a relatively small area.

2. (C) ITEM. RO-166, Recorder Processor Viewer.

DISCUSSION. In the past, the amount of developer in the RO-166 has been a major factor in determining the time which could be spent over the mission area. The previous time used for planning was three and

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SUBJECT: Operational Report-Lessons Learned (RCS-CSFCR 67)

one half hours for one mission. Extending the time over mission area has been accomplished by SIAR maintenance personnel who substituted a smaller inside diameter hose for the one presently utilized. This smaller hose still furnishes the roller with sufficient monobath developer and extends the time capability of the RO-166 to approximately four and a half hours.

OBSERVATIONS. This modification plus use of 200 gallons of fuel in the 300 gallon drop tanks provides an extended time over target and an adequate fuel reserve to proceed to an alternate airport if necessary.

3. (U) ITEM. Qualification of CH-47 Replacement Aviators.

DISCUSSION. There is a considerable variance in the experience level of recent replacement aviators and the requirements for CH-47 qualifications as stated in TC 1-23. In some cases the only cargo helicopter experience of an aviator is that obtained in CH-47 transition. Several recent replacements were sent direct to CH-47 transition from the Rotary Wing Qualification Course. These individuals require extensive and intensive in-country orientation and training. The non-instrument qualified aviator also affects the unit's all weather capability.

OBSERVATIONS. Adherence to TC 1-23 prerequisites for transition into CH-47 aircraft would significantly improve the quality of replacement aviators and reduce in-country training time. The increased crew proficiency would allow more effective utilization of the CH-47 capabilities.

4. (U) ITEM. Propeller Damage (U-1A).

DISCUSSION. Incidence of propeller damage increases during the dry season. The damage most common is caused by loose rocks and gravel on unimproved strips being drawn into the propeller during necessary maximum performance take-offs. Damage sometimes is serious enough to require propeller change.

OBSERVATIONS. Run-up pads constructed of PSP, concrete, macadam, or penepime greatly reduce this damage hazard.

C. TRAINING AND ORGANIZATION. None

D. INTELLIGENCE.

1. (U) ITEM. VFR Navigation Maps.

DISCUSSION. Numerous villages depicted on present maps are no longer in existence due to combat destruction. Throughout the Mekong Delta, canals have been constructed since the production of the maps presently

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SUBJECT: Operational Report-Lessons Learned (RCS-CSFOR 67)

in use. Canals are one of the primary navigation aids in the Delta area as natural terrain features are limited. Pinpoint accuracy is required in navigation through this area to avoid hostile strong points, friendly artillery fires and friendly air strikes which may be conducted along the flight route. Inaccurate maps require additional hours of orientation of newly assigned aviators before they can be cleared as fully operational.

OBSERVATIONS. A more current map series would simplify VFR navigation in the Delta area and reduce time required for aviator in-country orientation.

E. LOGISTICS.

1. (C) ITEM. Cathode Ray Tube (SLAR).

DISCUSSION. The command has experienced a problem in the short supply of Cathode Ray Tubes (CRT) since arrival of the electronic sensors in country two years ago. This is due, in part, to frequent changes in Federal Stock Numbers. The appropriate technical manual, TM 11-5895-284-35P lists two CRT's, a left and right. It was previously accepted that these CRT's were not interchangeable due to different FSN's and advice received from factory technical representatives. Two left hand CRT's were installed in an indicator assembly and were extensively tested on the bench set. Interchangeability was accomplished by reversing the leads of V-2 and V-3, and V-4 and V-5 within the indicator assembly. There was no time delay involved as those leads must be connected with each installation.

OBSERVATIONS. Flight tests verified the suitability of this installation. Final inspection and evaluation indicated no damage to equipment nor deterioration of imagery quality.

2. (U) ITEM. U-1A (Otter) Fuel Pumps.

DISCUSSION. The U-1A is equipped with two fuel pumps, one engine driven (FSN 2515-541-7082) and one electric (FSN 2915-810-7036). The electric pump is in apparent short supply, as this unit has not received one in several months. The engine pump has larger ports and lower pressure than the electric pump, they are otherwise identical.

OBSERVATIONS. By use of two standard brass plumbing adapters and adjusting output pressure, the engine driven pump can be adapted to the electric drive motor and used as a replacement for the electric pump.

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SUBJECT: Operational Report-Lessons Learned (RCS-CSFOR 67)

3. (U) ITEM. Technical Manuals (APS/94, SLAR).

DISCUSSION. Large quantities of SLAR electronic parts are not marked by numbers which reveal the parts identity in the technical manual. After the part is identified there is still the problem of locating the appropriate page of the technical manual because it lacks a part number-page number cross reference. A card file has been developed which shows all SLAR line items, listed in all associated manuals, by part number and by FSN. Each card lists the FSN, the manufacturer's part number, manufacturer, technical manual and number of pages on which it is listed within the technical manual.

OBSERVATIONS. This card file took approximately four months to complete. It has eliminated the necessity for hours of searching for parts data and expedites reference to technical manuals.

4. (U) ITEM. Igniters for T-53, L-7 Engine.

DISCUSSION. Difficulty has been experienced in starting the left engine on the OV-1 (Mohawk) aircraft. Inspection showed the difficulty was caused by badly burned igniter plugs. Analysis revealed the igniter plugs on the left engine were failing from exposure to high temperature causing failure earlier than the igniters on the right engine. This was attributed to habitually starting the left engine first as prescribed in TM 55-1510-204-10. The first engine started uses battery power only for cranking, the second engine uses battery power plus generator assist which results in a constant, higher voltage and a faster, cooler start.

OBSERVATIONS. By alternating first starts between the left and right engines, this problem was overcome. Alternating starts evenly distributes wear in the left and right engines eliminating the necessity of replacing igniters between scheduled hot end inspections.

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SUBJECT: Operational Report-Lessons Learned (RCS-CSFOR 67)

SECTION II, PART II

RECOMMENDATIONS

1. (U) That recurring reports be periodically reviewed by each headquarters requiring reports with a view to consolidation and elimination whenever possible.
2. (U) That aviators transitioned into the CH-47 helicopter meet the prerequisites of TC 1-23 without waiver.
3. (U) That continued effort be made to update VFR navigational maps to provide the most accurate data available.

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THOMAS E. THOMPSON
LTC Infantry
Commanding

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AVGC-SC (7 Feb 67) 1st Ind (U)
SUBJECT: Operational Report - Lessons Learned (ORLI) for Period Ending
30 April 1967 (RCS CSFOR-65)

HEADQUARTERS, 12TH COMBAT AVIATION GROUP, APO 96491 4 June 1967

THRU: Commanding General, II Field Force Vietnam, APO 96266

TO: Assistant Chief of Staff Force Development
Department of the Army
Washington, D.C. 20310

1. One copy of the 222nd Combat Aviation Battalion's Operational Report - Lessons Learned (ORLI) (RCS CSFOR-65) for period ending 30 April 1967, is forwarded in compliance with USARV Regulation 1-19, dated 8 February 1967.

2. Comments are included on observations and recommendations made by the battalion commander:

a. Personnel: Reference Section II, Part I, page 4. Recurring reports are continually under review for consolidation or elimination. The listed personnel reports are required for specific actions. Manual consolidation of personnel information roster for the suggested uses is not possible without a substantial increase in personnel assigned the personnel section in this headquarters.

b. Operations: Reference Section II, Part I, page 4. During Phase 1, Operation JUNCTION CITY, 22 February through 6 March 1967 all CH-47 (Chinook) support was consolidated under control of the 222nd Combat Support Aviation Battalion. During this period operational control was exercised over four assault support helicopter companies. This was a new concept for the employment of CH-47's in a large scale tactical operation. The effectiveness of the centralized organization of CH-47 (Chinook) operation was considered to be excellent. However, there were disadvantages which can be overcome in future operations. The after action report is inclosure 2 of basic communications.

c. Training and Organization: None

d. Intelligence: None

e. Logistics: None

FOR THE COMMANDER:

1 Incl
as

William N. Walker
WILLIAM N. WALKER
CPT, INF
Asst Adjutant

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AVFBC-H (14 May 1967) 2d Ind
SUBJECT: Operational Report-Lessons Learned, 222d Aviation Battalion,
30 April 1967 (RCS CSFOR-65)

DA, HQ II FFORCEV, APO San Francisco 96266 7 JUN 1967

THRU: Commanding General, 1st Avn Bde, ATTN: AVBA-C, APO 96307

Commanding General, USARV, ATTN: AVHGC-DH, APO 96307

Commander in Chief, US Army Pacific, ATTN: GPOP-MH, APO 96558

TO: Assistant Chief of Staff for Force Development, Dept of the
Army, Washington, D.C. 20310

The inclosed Operational Report has been reviewed for information
and is forwarded to your headquarters for comment.

FOR THE COMMANDER:


Capt. AGC
Asst. AG

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AVBA-C (14 May 67)

3rd Ind

SUBJECT: Operational Report-Lessons Learned Period Ending 30 April 1967
(RCS-CSFOR 67)

HEADQUARTERS, 1ST AVIATION BRIGADE, APO 96307

THRU: Commanding General, United States Army Vietnam, ATTN: AVHGC-DH
APO 96307
Commander in Chief, United States Army Pacific, ATTN: GPOP-MH
APO 96307

TO: Assistant Chief of Staff Force Development, Department of the Army
(ACSFOR DA) Washington D. C. 20310

1. This headquarters has reviewed subject report of the 222nd Combat Support Aviation Battalion as indorsed and considers it to be adequate and concurs with the contents except as noted.

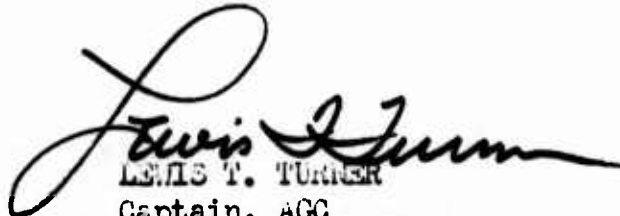
2. The following additional comments are considered pertinent:

a. Reference Section II, Part I, para A1, page 4: Personnel;
It is not practical to consolidate recurring reports. Consolidation would provide additional means for error and would slow down USARV staff sections in processing requisitions, requests for assignment instructions, etc. Specific teams at USARV handle specific actions and it would be impractical to breakout information from a consolidated report as recommended.

b. Reference Section II, Part I, para E2, page 6: Logistics;
The described procedure is not recommended by this headquarters. The pumps may have differing qualification requirements. In addition, both pumps are in equally short supply (101 due in for the engine driven and 110 due in for the electric driven pump) in RVN. The ordering of the wrong part will create an artificial demand on the supply system unsupported by real requirements. Unit is being notified.

FOR THE COMMANDER:

1 Incl
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LEWIS T. TURNER
Captain, AGC
Asst Adjutant General

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AVHGC-DST (14 May 67) 4th Ind
SUBJECT: Operational Report-Lessons Learned for the Period Ending
30 April 1967 (RCS CSFOR-65) (U)

HEADQUARTERS, UNITED STATES ARMY VIETNAM, APO San Francisco 96307 17 JUL 1967

TO: Commander in Chief, United States Army, Pacific, ATTN: GFCP-OT,
APO 96558

1. (U) This headquarters has reviewed the Operational Report-Lessons Learned for the period ending 30 April 1967 from Headquarters, 222d Aviation Battalion as indorsed.

2. (C) Pertinent comments follow:

a. Reference item concerning consolidation of reports, paragraph a1, Section II, Part I, page 4; Section II, Part II, page 8; paragraph 2a, 1st Indorsement and paragraph 2a, 2d Indorsement: Non-Concur. It is sound administrative procedure to review recurring reports periodically and consolidate whenever possible. This headquarters imposes only those reports essential to operations and proper control as specified in Department of the Army Directives. Reporting requirements placed on major subordinate commanders and their units are under continuing review and analysis with a view of meeting the objectives outlined in AR 335-15.

b. Reference item concerning TC 1-23 prerequisites for transition into CH-47 aircraft paragraph b3, Section II, Part I, page 5, and paragraph 2, Section II, Part II, page 8: Concur. Recommend the United States Army Aviation School continue to adhere to the pre-requisites of TC 1-23 for transition into CH-47 aircraft.

c. Reference item concerning updating NFR Navigational Maps, paragraph d1, Section II, Part I, page 5 and paragraph 3, Section II, Part II, page 8: Concur. A continued effort must be made to update VFR (Visual Flight Reconnaissance) navigational maps to provide the most accurate data available. The VFR navigational maps, however, are an Air Force product at a scale of 1:500,000. Maps of this scale are never used when pinpoint accuracy is required; in addition, they are not updated as frequently as standard medium and large scale maps generally used by Army aviation units, i.e., 1:250,000 scale Joint Operations Graphics and 1:50,000 scale topographic maps.

d. Reference item concerning interchange of cathode ray tubes; paragraph e1, Section II, Part II, page 6: Concur. The ingenuity of the personnel concerned evidently attributed to an increase of the units operational readiness.

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AVHGC-DST (14 May 67)


4th Ind

SUBJECT: Operational Report-Lessons Learned for the Period Ending
30 April 1967 (RCS CSFOR-65) (U)

e. Reference item concerning U-1A fuel pumps, paragraph e2,
Section II, Part II, page 6 and paragraph 2b, 3d Indorsement: Nonconcur.
Concur in comment contained in paragraph 2b, 3d Indorsement. Action
indicated by 1st Aviation Brigade is considered appropriate.

FOR THE COMMANDER:

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E. L. KENNEDY
Cpt. AGC
Asst Adjutant General

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GPOP-DT (14 May 67)

5th Ind (C)

SUBJECT: Operational Report for the Quarterly Period Ending 30 April 1967
from HQ, 222d Aviation Battalion (RCS CSFOR-65) (U)

HQ, US ARMY, PACIFIC, APO San Francisco 96558 **17 OCT 1967**

TO: Assistant Chief of Staff for Force Development, Department of the
Army, Washington, D. C. 20310

(C) This headquarters has evaluated subject report and forwarding indorsements and concurs in the report as indorsed subject to the addition of the following comments pertaining to VFR navigational maps:

a. USARPAC Reg 95-14, para 3, identifies the appointment of flight information officers as a responsibility of subordinate commands. The flight information officer will be responsible for providing data required for updating the Flight Information Publications. A continued effort should be made by the "users" to provide accurate data to update the Flight Information Publications as much of this information is used in updating maps. Generally, all maps are updated after enough major changes have been received from the users to warrant a new publication.

b. A new DOD Tactical En Route VFR Low Level Flight Chart has been developed for RVN. Two sheets printed on both sides will cover all of Vietnam. This PC chart 1:500,000 will be in the field by 30 Nov 67. Updating of this chart will be on a quarterly basis or as required. A Joint Operation Graphic (JOG-A) 1:250,000 is presently being revised and will replace the USAF Aeronautical Approach Charts (AC) 1:250,000 and the Aeronautical Chart (AGC) 1:250,000.

c. A new series of maps to be used in planning is the PICTOMAP Series L-8020. These maps are 1:25,000 supplement to the basic L-7014 which is a 1:50,000 scale. This large scale usually precludes airborne use because of the number of sheets required, but it is recommended for planning purposes.

FOR THE COMMANDER IN CHIEF:


R. F. OSBOURN
MAJ, AGC
Asst AG

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11 Inclosure 1 to Operational Report-Lessons Learned (RCS-CSFOR 67)

222D AVIATION BATTALION STATISTICS

AVERAGE NUMBER OF AIRCRAFT COMMITTED DAILY

U-1A	10
OV-1	7
CH-47	<u>4</u>
TOTAL	21

Total hours flown	9,545
Total sorties flown	13,359
Total passengers carried	35,960
Total tons of cargo transported	8,637
Number of aircraft hit by ground fire	19

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Inclosure 2 to Operational Report-Lessons Learned (RCS-CSFOR 67)

SUBJECT: After Action Report, CH-47 (Chinook) Operations, OPERATION JUNCTION CITY, Phase I

1. General: During Phase I, Operation Junction City, 22 Feb - 6 Mar 67, CH-47 (Chinook) support was consolidated under the control of 222d Combat Support Aviation Battalion. This was a new concept of CH-47 employment being employed for the first time in a large scale tactical operation.

2. Organization: The 222d Combat Support Aviation Battalion with the 147th Assault Support Helicopter Company (ASHC) organic, was augmented with three additional Assault Support Helicopter Companies placed under the Operational Control (OPCON) of the 222d Combat Support Aviation Battalion. These additional companies were the 178th ASHC and the 213th ASHC from the 11th Combat Aviation Battalion and the 180th ASHC from the 10th Combat Aviation Battalion. This organization was the control headquarters for all CH-47 support during this phase of the operation. Operational control of these units was assumed on 18 Feb for the 178th ASHC and 213th ASHC and 20 Feb for the 180th ASHC. The 180th ASHC was released from OPCON on 25 Feb and the 178th ASHC and 213th ASHC were released on 6 Mar 67.

3. Communications and Operational Procedures: See Tab A.

4. Results and Support Rendered: The effectiveness of the centralized organization of CH-47 (Chinook) operation was considered to be excellent. The Commanding Officer of this organization was able to devote his entire effort to insuring effective medium helicopter support, not being distracted by extensive planning requirements for assault helicopter operations conducted concurrently. The battalion operations center (BOC) was also specialized and tailored for CH-47 operations, having an officer experienced in these operations on duty 24 hours a day. This freed the AAE at II FF V from the daily requirement of assigning missions down to the company and limited their requirement to approval or disapproval of mission requests. On D-day, the CH-47's flew a total of 428 sorties in 194 flight hours carrying 888 passengers and 774 tons of cargo. These sorties were pre-planned and closely integrated in the assault landing schedules of the supported forces and provided timely emplacement of supporting artillery and effective resupply. Total hours flown during the period 22 Feb - 6 Mar 67 were 1131 and provided the transport of 5568 ton of cargo and 6387 passengers.

5. Advantages and Disadvantages of this organization:

a. Advantages:

(1) Provides a single command control element for all CH-47 operations which intensifies coordination and supervision of this support.

(2) Facilitates more effective tailoring of support to requirements, especially effective when the mission requires the massing of two or more companies in support.

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(3) More effective liaison is established in that all liaison officers are experienced in CH-47 operations. Liaison officers were provided to each major tactical headquarters on a continuing basis and were available to assist in planning CH-47 requirements whenever needed.

(4) Higher headquarters was relieved from the requirement for detailed planning and assignment of missions making their staff available for other pressing requirements of planning and supervision.

(5) Most effective when Chinooks are supporting large tactical operations which require extensive staff planning and supervision of Chinook support.

b. Disadvantages:

(1) Supported units must coordinate aviation support through more than one liaison officer. When Assault Helicopter Companies and Assault Support Helicopter Companies are both being used, the supported unit must coordinate with two or more liaison officers. In the composite battalion this is done by one liaison officer.

(2) Lack of organic gunships in this battalion required coordination with other battalions for gunship support. During large scale operations, gunships are required daily to accompany and protect CH-47's operating in "hot" LZ's and PZ's.

(3) This battalion has no organic pathfinder detachment. This obstacle was overcome by borrowing nine (9) pathfinders from the 269th Combat Aviation Battalion (one officer and eight enlisted men) and coordinating use of pathfinders assigned to the various companies. The 269th Combat Aviation Battalion can not be expected to assist in the manner in the future as they will have their own operational requirements. During this period, the 269th Combat Aviation Battalion was still in the training and organization process which made their pathfinder detachment available.

(4) The 222d Combat Support Aviation Battalion has one UH-1C assigned for command and control requirements. While planning provided continuous availability of this aircraft throughout the period, normal availability of this type aircraft would evidence a requirement for a minimum of 2 UH-1C aircraft to assure the availability of one at all times. There are additional UH-1C's available in the assigned companies (one per ASHC) but their use for Battalion C&C would reduce the company liaison and command control capability which includes emplacement of pathfinders in PZ's and LZ's, coordination of missions with supported units, and maintenance support to aircraft in field locations when needed.

6. Discussion: The assignment of all Assault Support Helicopter Companies under one command control headquarters is an extremely effective means of employing these assets during large scale operations. It provides a CH-47 experienced staff to plan and supervise complicated support operations without diluting the planning capability of the Assault Helicopter Battalions. It provides the specialized liaison required by supported units. It relieves higher headquarters of the detailed work of mission assignment and

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frees them for other planning and supervision tasks. It provides a point of contact where the total Chinook capability can be evaluated, manipulated and supervised. It is especially effective when support requirements indicate the massing of efforts of more than one company. This employment procedure requires greater communications support for command and control as well as increased requirements for command and control and liaison aircraft. The best organization for CH-47 employment during normal operations over a widespread area appears to be the composite battalion which would provide all aviation support to the area. There is a requirement for organic gunships to make the mission planning for gunship support of CH-47 operations independent of the Assault Helicopter Battalion's plans for gunship utilization.

7. Recommendations:

a. That the consolidated of CH-47 (Chinook) support under one command headquarters during future large scale tactical operations be adopted as the standard employment procedure.

b. That the 222d Combat Support Aviation Battalion be the headquarters assigned this mission in future large scale tactical operations. The missions of the other organic companies assigned the 222d Combat Support Aviation Battalion, the 73rd Aviation Company (AS) and 54th Aviation Company (AM-FW), do not detract from this battalion's capability to operate as the control headquarters when CH-47 operations are consolidated.

c. That a minimum of one additional UH-1C be assigned this Battalion to provide a greater capability to effect the command and control requirements of this organization on a continuous basis.

d. That an armed helicopter platoon be assigned to the 222d Combat Support Aviation Battalion.

e. That the Pathfinder augmentations, para 09 TOE 1-256F with equipment, be authorized this battalion.

f. That two (2) additional liaison officers be authorized to meet the mission requirements of this method of employment.

g. That the composite battalion organization be retained as the normal employment of Chinook assets (i.e., 11th Combat Aviation Battalion with both Assault and Assault Support Helicopter Companies assigned) on an area basis.

1 Incl

/s/Thomas E. Thompson
/t/THOMAS E. THOMPSON
LTC, Infantry
Commanding

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TAB A

After Action Report - CH-47 (Chinook) Operations, OPERATION JUNCTION CITY, Phase 1

1. Purpose: This inclosure is to provide a detailed description of the organization, communications, operational procedures and results of the experimental CH-47 (Chinook) Battalion concept employed during Phase 1, OPERATION JUNCTION CITY.

2. Organization: The 222d Combat Support Aviation Battalion was established as the control headquarters of all CH-47 (Chinook) operations during Phase 1 of this operation. Assault Support Helicopter Companies involved were the 147th (normally assigned to the 222d Combat Support Aviation Battalion), the 180th (normally assigned to the 10th Combat Aviation Battalion), the 178th and the 213th (both normally assigned to the 11th Combat Aviation Battalion), the 178th, 180th and 213th companies being placed under operational control (OPCON) of the 222d Combat Support Aviation Battalion. The operations were conducted from a forward Battalion Operations Center (BOC) established at Phu Loi. Operational elements of the 147th ASHC were moved to Phu Loi which is also the base for the 178th ASHC and the 213th ASHC. The 180th ASHC operational element was located at Cu Chi.

3. Communications:

a. Telephone: Direct communication lines were established between the BOC and all companies and between BOC and II FF V AAE. This was accomplished by use of wire lines at Phu Loi and by means of priority VHF relay circuits (hot lines) between BOC and the 180th at Cu Chi and the AAE at II FF V headquarters. These circuits, once established, remained in operation until their use was terminated.

b. Radio: A battalion command net (FM) was established with each company and BOC as stations in the net on a 24 hour basis. This net was used as a back-up flight following net (FM) for the aircraft of the battalion. BOC also operated a radio in the 12th Combat Aviation Group Command Net (FM). BOC operated a UHF radio net used for back-up flight following and command and control. BOC also operated in the 12th Combat Aviation Group Command Nets for HF and AM. All nets remained operational throughout the period although traffic on the HF and AM nets was limited to commo checks. Each company operated FM and UHF nets which provided flight following for company aircraft.

4. Liaison: A 222d Aviation Battalion representative was sent to each supported division headquarters and remained with that headquarters throughout the period. He was available to assist in planning Chinook utilization within the division and provided a contact for the battalion through which problem areas could be resolved. Additionally, supporting companies furnished liaison officers to supported units on request or when mission requirements indicated a need.

5. Battalion Operations Center (BOC): The BOC was staffed on a 24 hour basis by a Chinook experienced officer and enlisted operations personnel.

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TAB A Continued

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A daily journal was maintained and all operational reports were consolidated here for submission to higher headquarters. Approved mission requests were received at the BOC from II FF V and assigned to the companies. When necessary, liaison was established with support units. A situation map of the Operational Area was maintained at the BOC and updated from both an operational and intelligence standpoint daily. Aircraft availability and mission progress status boards were maintained continuously to provide a current picture of Chinook capabilities at all times.

6. Employment: During D-day operations and on D+1, the companies were placed in Direct Support of the divisions, the 178th and 213th ASHCs DS to 1st Infantry Division, the 147th and 180th ASHCs DS to 25th Infantry Division. After this initial displacement of units, supplies and equipment into the forward area, missions were requested through normal channels and assigned to companies by BOC.

7. Units Supported: CH-47 support was furnished to two divisions, the 1st Infantry Division with the 173d Light Infantry Brigade attached and the 25th Infantry Division with the 196th Light Infantry Brigade, the 3rd Brigade of the 4th Infantry Division and the 11th Armored Cav Regiment attached. In addition to the support of the Junction City Operation, CH-47 support was also provided to the 9th Infantry Division, III and IV Corps Headquarters and MACV Headquarters.

8. Support Rendered Junction City:

	1st Inf Div			25th Inf Div		
	PAX	TONS	HOURS	PAX	TONS	HOURS
D-day	472	466	130.8	116	308	62.5
D+1	395	235	93.8	70	142	27.9
Total 22 Feb - 6 Mar	4108	2822	644.9	2279	2746	486.5

9. Summary of Support: The Junction City operation was primary user of CH-47 support during the period 22 Feb - 6 Mar 67 with 6387 passengers transported, 5568 tons of cargo hauled and 1131.4 hours of CH-47 time flown in its support. During this same period however, 3,786 passengers, 1173 tons and 330.6 hours were flown for units involved in other than Junction City Operations. Total passengers hauled during this period - 10,173; total tons hauled - 6,741; and total hours flown - 1,462.

	PASSENGERS	TONS	HOURS
Junction City	6387	5568	1131.4
Other	3786	1173	330.6
Total	10,173	6741	1462.0

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